

AMENDMENTS TO THE CLAIMS

Pursuant to 37 C.F.R. § 1.121 the following listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended) An apparatus for detecting a scene change in a compressed moving-picture comprising:

an image structure judging unit operable to judge portion for judging an image structure of an inputted compressed moving-picture;

a feature quantity extracting unit operable to extract portion for extracting a feature quantity based on top and bottom double data in vertical direction of an image with respect to a field structure image when a judgment result of the image structure judging unit portion is a frame structure image;

a storage area for storing data extracted by the feature quantity extracting unit portion;

an extracted data comparing unit operable to compare portion for comparing the extracted data and calculating a quantity of variation of a picture; and

a scene change judging unit operable to judge portion for judging a scene change by the use of the quantity of variation calculated by the extracted data comparing unit portion.

2. (Currently Amended) An apparatus for detecting a scene change in a compressed moving-picture comprising:

a feature quantity extracting unit operable to extract portion for extracting a feature quantity based on block data for one block independently of an image structure of an inputted compressed moving-picture;

a storage area for storing block data extracted by the feature quantity extracting unit portion;

an extracted data comparing unit operable to compare portion for comparing a feature quantity by the use of double block data in vertical direction of an image with respect to a field structure image when an image from which a feature quantity has been extracted is a frame structure image; and

a scene change judging unit operable to judge portion for judging a scene change by the use of the quantity of variation calculated by the extracted data comparing unit portion.

3. (Cancelled)

4. (Currently Amended) An apparatus for detecting a scene change in a compressed moving-picture comprising:

a scene change judging unit operable to judge portion for judging a plurality of scene changes change; and

~~a scene change interval retrieving portion for retrieving scene changes that exist at a start point and an end point of a specified particular interval among scene changes detected by the scene change judging portion~~

a measuring unit operable to select a plurality of pairs of the scene changes from the plurality of scene changes and to measure an interval length for each of the plurality of pairs;
and

a detecting unit operable to detect, from the plurality of pairs a pair of scene changes having an interval length equal to a predefined interval length.

5. (Currently Amended) An apparatus for detecting a scene change in a compressed moving-picture as set forth in Claim 1, wherein a threshold determined on the reference of a maximum quantity of variation of an image is included in thresholds that the scene change judging unit portion uses as a criterion of a scene change.

6. (Currently Amended) An apparatus for detecting a scene change in a compressed moving-picture as set forth in Claim 2, wherein a threshold determined on the reference of a maximum quantity of variation of an image is included in thresholds that the scene change judging unit portion uses as a criterion of a scene change.

7. (Cancelled)

8. (Currently Amended) The apparatus for detecting a scene change in a compressed moving-picture as set forth in Claim 4, wherein the judging unit is further operable to use a threshold as a criterion of a scene change; and

the threshold includes a maximum quantity of variation of an image ~~a threshold determined on the basis of a maximum quantity of variation of an image is included in thresholds that the scene change judging portion uses as a criterion of a scene change.~~

9. (Cancelled)

10. (Currently Amended) A method of detecting a scene change in a compressed moving-picture comprising the steps of:

~~an image structure judging step of judging an image structure of an inputted compressed moving-picture;~~

~~a feature quantity extracting step of extracting a feature quantity based on top and bottom double data in vertical direction of an image with respect to a field structure image when a judgment result of the image structure judging step is a frame structure image;~~

~~a storage area for storing data extracted by the feature quantity extracting step in a storage area;~~

~~an extracted data comparing step of comparing the extracted block data and calculating a quantity of variation of a picture; and~~

~~a scene change judging step of judging a scene change by the use of the quantity of variation calculated by the extracted data comparing step.~~

11. (Currently Amended) A method of detecting a scene change in a compressed moving-picture comprising the steps of:

~~a feature quantity extracting step of extracting a feature quantity based on block data for one block independently of an image structure of an inputted compressed moving-picture;~~

~~a storage area for storing block data extracted by the feature quantity extracting step in a storage area;~~

~~an extracted data comparing step of comparing a feature quantity by the use of double block data in vertical direction of an image with respect to a field structure image when an image from which a feature quantity has been extracted is a frame structure image; and~~

~~a scene change judging step of judging a scene change by the use of the quantity of variation calculated by the extracted data comparing step.~~

12. (Cancelled)

13. (Currently Amended) A method of detecting a scene change in a compressed moving-picture comprising the steps of:

~~a scene change judging step of judging a plurality of scene changes change;~~

selecting a plurality of pairs of scene changes from the plurality of scene changes and measuring an interval length for each of the plurality of pairs of scene changes; and

~~a scene change interval retrieving step of retrieving scene changes that exist at a start point and an end point of a specified particular interval among scene changes detected by the scene change judging step~~

detecting, from the plurality of pairs of scene changes, a pair of scene changes having an interval length equal to a predefined interval length.

14. (Original) A recording medium that computer-readably records a program for detecting a scene change in a compressed moving-picture, the program comprising:

an image structure judging step of judging an image structure of an inputted compressed moving-picture;

a feature quantity extracting step of extracting a feature quantity based on top and bottom double data in vertical direction of an image with respect to a field structure image when a judgment result of the image structure judging step is a frame structure image;

a storage area for storing data extracted by the feature quantity extracting step;

an extracted data comparing step of comparing the extracted data and calculating a quantity of variation of a picture; and

a scene change judging step of judging a scene change by the use of the quantity of variation calculated by the extracted data comparing step.

15. (Original) A recording medium that computer-readably records a program for detecting a scene change in a compressed moving-picture, the program comprising:

a feature quantity extracting step of extracting a feature quantity based on block data for one block independently of an image structure of an inputted compressed moving-picture;

a storage area for storing block data extracted by the feature quantity extracting step;

an extracted data comparing step of comparing a feature quantity by the use of double block data in vertical direction of an image with respect to a field structure image when an image from which a feature quantity has been extracted is a frame structure image; and

a scene change judging step of judging a scene change by the use of the quantity of variation calculated by the extracted data comparing step.

16. (Cancelled)

17. (Currently Amended) A recording medium that computer-readably records a program for detecting a scene change in a compressed moving-picture, the program comprising:

a scene change judging step of judging a scene change;

a measuring step of selecting a plurality of pairs of the scene changes from the plurality of scene changes and measuring an interval lenght for each of the plurality of pairs;
and

~~a scene change interval retrieving step of retrieving scene changes that exist at a start point and an end point of a specified particular interval among scene changes detected by the scene change judging step~~

a detecting step of detecting, from the plurality of pairs of scene changes,
a pair of scene changes having an interval length equal to a predefined interval length.

18. (New) An apparatus for detecting a scene change in a compressed moving picture comprising:

 a scene change judging unit operable to judge a first scene change and a second scene change at a particular point having a predefined interval length from the first scene change.